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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,497	11/09/2001	Cecile Drogou	1974.PKG	3378

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Cynthia L. Foulke
NATIONAL STARCH AND CHEMICAL COMPANY
10 Finderne Avenue
Bridgewater, NJ 08807-0500

EXAMINER

PATTERSON, MARC A

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/053,497

Applicant(s)

DROGOU ET AL.

Examiner

Marc A Patterson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 21-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 21-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

NEW REJECTIONS

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 21 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248).

With regard to Claim 1, Yang et al disclose a process for bonding difficult – to – bond substrates (difficult substrates; column 5, lines 56 – 57) comprising bonding a first substrate to a second substrate (bonding end sheets of a book block to a book cover case in bookbinding; column 5, lines 48 – 50) with a hot – melt adhesive composition (column 5, lines 48 – 50); the composition is thermoplastic (column 8, line 43) and Yang et al teach that the adhesive composition comprises an adhesive component selected from a group of components which includes ethylene n – butyl acrylate copolymer (column 8, lines 66 – 67) and a tackifier selected from among a group of tackifiers which includes modified terpene (styrenated terpene; column 8, lines 31 – 34). It would therefore be obvious for one of ordinary skill in the art to select an adhesive component comprising ethylene n – butyl acrylate copolymer and a tackifier comprising modified terpene, as ethylene n – butyl acrylate copolymer and modified terpene are among the components which are taught by Yang et al.

With regard to Claim 3, the adhesive also comprises a wax (column 9, line 21).

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With regard to Claim 21, the adhesive comprises 30% by weight ethylene n – butyl acrylate (column 8, line 64), 30% by weight tackifier (column 8, lines 39 – 42) and 30% wax (column 9, lines 39 – 41).

With regard to newly submitted Claims 30 – 32, when an applicant claims that additional materials are excluded by the recitation ‘consisting essentially of,’ applicant has the burden of showing that the introduction of additional components would materially change the characteristics of applicant’s invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964) ; *In re Herz*, 537 F2d. 549, 551 – 552, 190 USPQ 461, 463 (CCPA 1976).

3. Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Milks (U.S. Patent No. 5,401,791).

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Yang et al disclose a process for bonding substrates in bookbinding which comprises a modified terpene comprising styrenated terpene as discussed above. Yang et al fail to disclose a modified terpene which comprises terpene phenolic.

Milks teaches that styrenated terpene and terpene phenolic are interchangeable in the bonding of substrates (suitable tackifiers include styrenated terpene and terpene phenolic; column 4, lines 12 – 20) in bookbinding (column 3, lines 35 – 37) for the purpose of obtaining a bond which has good extensibility and flexibility (column 4, lines 35 – 38). Therefore, one of ordinary skill in the art would have recognized that the utility of a terpene phenolic instead of a styrenated terpene in Yang et al, which is a process for binding substrates in bookbinding, if a good extensibility and flexibility of the bond in the final product were desired.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for terpene phenolic instead of styrenated terpene in Yang et al in order to obtain a bond which has good extensibility and flexibility as taught by Milks.

4. Claims 4 – 5 and 23 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Dupont et al (U.S. Patent No. 5,325,781).

Yang et al disclose a process for bonding substrates as discussed above. The substrates comprise paper (column 12, lines 54 – 55). With regard to Claims 4 – 5 and 23 – 24, Yang et al fail to disclose a substrate which is treated with ultraviolet varnish.

Dupont et al teaches the treatment of paper (column 1, line 18) with ultraviolet varnish (covered with UV varnish; column 3, lines 30 – 32) for the purpose of obtaining a paper having

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good mechanical properties when ink is applied to the paper (column 3, lines 25 – 30).

Therefore, one of ordinary skill in the art would have recognized the advantage of providing for Yang et al, which is a paper substrate, with the ultraviolet varnish of Dupont, depending on the desired mechanical properties of ink applied to the finished paper.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for treatment with ultraviolet varnish of Dupont et al in Yang et al in order to ensure good mechanical properties for the paper when ink is applied to the paper as taught by Dupont et al.

5. Claims 6 – 8 and 25 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Howells (U.S. Patent No. 4,566,981).

Yang et al disclose a process for bonding substrates comprising paper as discussed above. With regard to Claims 6 – 8 and 25 – 27, Yang et al fail to disclose a substrate which is fluorochemical treated and grease – resistance treated.

Howells teaches the treatment of a paper (column 1, lines 9 – 10) with a fluorochemical, for the purpose of imparting oil resistance on the paper (column 1, line 10 – 12). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for treatment of the substrate disclosed by Yang et al, which comprises paper, with the fluorochemical taught by Howells, depending on the desired oil resistance, and therefore grease – resistance, of the paper as taught by Howells.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the treatment with a fluorochemical in

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Yang et al in order to obtain a substrate, both paper, which is treated for grease resistance as taught by Howells.

6. Claims 28 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Gruber et al (U.S. Patent No. 5,475,080).

Yang et al disclose a process for bonding substrates comprising paper as discussed above. Yang et al fail to disclose a substrate which has a surface energy between 25 dyn/cm and 35 dyn/cm.

Gruber et al teach a paper (column 6, lines 17 – 18) treated with a coating which imparts to the paper a surface energy of 35 dyn/cm (column 6, lines 35 – 37) and which provides the paper with enhanced strength and water resistance (column 1, lines 23 – 25). Therefore, one of ordinary skill in the art would have recognized the utility of providing the coating of the substrate by Yang et al, which is paper, with the coating of Gruber et al, depending on the desired strength and water resistance of the end product as a taught by Gruber et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a coating, which imparts to the substrate a surface energy of 35 dyn/cm, in Yang et al, in order to obtain a substrate with enhanced strength and water resistance as taught by Gruber et al.

ANSWERS TO APPLICANT'S ARGUMENTS

7. Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of Claims 1, 3 and 21 as being unpatentable over Yang et al (U.S. Patent No. 6,207,248), 35 U.S.C. 103(a) rejection of

Claims 2 and 22 as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Milks (U.S. Patent No. 5,401,791), 35 U.S.C. 103(a) rejection of Claims 4 – 5 and 23 – 24 as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Dupont et al (U.S. Patent No. 5,325,781), 35 U.S.C. 103(a) rejection of Claims 6 – 8 and 25 – 27 as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Howells (U.S. Patent No. 4,566,981) and 35 U.S.C. 103(a) rejection of Claims 28 – 29 as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Gruber et al (U.S. Patent No. 5,475,080), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 6 of the remarks dated July 30, 2004, that although Yang et al may contain thermoplastic polymers Yang et al also comprises a reactive polyurethane hot melt adhesive and therefore does not comprise a thermoplastic adhesive.

However, because Yang et al comprise thermoplastic polymers, Yang et al constitutes a thermoplastic polymer; furthermore, the reactivity of Yang et al does not make it a non – thermoplastic polymer, as reactivity does not necessarily negate the thermoplastic behavior of a polymer.

Applicant also argues, on page 7, that Milks and Dupont et al fail to disclose a hot melt adhesive, which is not a reactive hot melt.

However, a hot melt adhesive, which is not a reactive hot melt is not claimed. Furthermore, as stated above, because Yang et al comprise thermoplastic polymers, Yang et al constitutes a thermoplastic polymer, and the reactivity of Yang et al does not make it a non –

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thermoplastic polymer, as reactivity does not necessarily negate the thermoplastic behavior of a polymer.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (571) 272 - 1497. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold

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Pyon, can be reached at (571) 272 – 1498. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

Marc Patterson
Art Unit 1772

Harold Pyon
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

9/28/04